



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,278	12/31/2003	Sebastien Andre	Q79001	6606
23373	7590	04/25/2005	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			BLEVINS, JERRY M	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b> 10/748,278	<b>Applicant(s)</b> ANDRE ET AL.	
	<b>Examiner</b> Jerry Martin Blevins	<b>Art Unit</b> 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 06/28/2004.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: UV laser source 8 (page 9, line 23). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

The applicants are reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

Art Unit: 2883

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In the present case, the word "said", found on lines 6, 10, and 11 should be reworded or removed. Appropriate correction is required.

### ***Claim Objections***

Claims 1, 3-5, and 7 objected to because of the following informalities.

Regarding Claim 1, the applicants claim a material transparent to ultraviolet type radiation (page 11, line 7). The phrase "ultraviolet type radiation" is not well defined. The examiner interprets this to simply mean ultraviolet radiation. Regarding Claim 3, two distinct polymer networks are claimed. However, the claim proceeds to mention a "said polymer network" (page 11, line 20) without specifying between the two distinct polymer networks. The examiner interprets "said polymer network" to refer to the second polymer network. Regarding Claims 4, 5, and 7, the claims include the word "preferably" (page 11, line 30, and page 12, lines 1, 3, and 15), which renders the claims not well defined. The interpretation of the examiner is that the limitations found after the word "preferably" are not needed in order for a reference to read on the claims.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 6, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by US Pre Grant Publication of Walker et al, number US 2003/0199603 A1.

Regarding independent Claim 1, Walker teaches an optical fiber (page 2, paragraph 18) having at least one Bragg grating (page 2, paragraph 18), the fiber comprising a core (page 1, paragraph 8) surrounded by a cladding (page 10, paragraph 113) and by a coating (page 2, paragraph 18). Walker also teaches that the grating is directly written through the coating (page 2, paragraph 18), which is made of a material that is transparent to ultraviolet radiation (page 2, paragraph 18) and contains a first polymer network interpenetrated by a second polymer. (Paragraph 22, pages 2 and 3, teaches crosslinks of two distinct polymer networks.)

Regarding Claim 2, Walker teaches the further limitation that the first polymer network is obtained through a photocuring cross-linking operation (paragraph 22 2, pages 2 and 3).

Art Unit: 2883

Regarding Claims 3 and 4, Walker teaches the further limitations that the first polymer network is obtained from a first component (a photocurable polymer) by a photocuring cross-linking operation (paragraph 22, pages 2 and 3) and that the second polymer network is obtained from a second component (a thermocurable polymer) by a distinct cross-linking operation (page 4, paragraph 40).

Regarding Claim 6, Walker teaches the further limitation that the first polymer network is obtained from a photocurable component by a cationic method and that the second polymer network is obtained from a second photocurable component by a radical method (page 5, paragraph 49 and page 10, paragraph 111).

Regarding independent Claim 8, Walker teaches the optical fiber with the limitations of Claim 1 incorporated in an optical device (page 1, paragraph 4, where the device is an optical fiber amplifier).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker in view of US Paten to Chihara et al, number 4,933,259.

Walker teaches the limitations of Claim 1 as well as the further limitation that the coating material is obtained from a liquid mixture of photocurable and thermocurable silicone (page 4, paragraphs 40 and 42). Walker does not teach the weight percentages of the photocurable silicone and the thermocurable silicone. Chihara (Claim 13, Column 16) teaches a mixture comprising a thermocurable component (about 5% to about 50% by weight) and a photocurable component (about 50% to about 95% by weight). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the weight percentages taught by Chihara into the liquid mixture of Walker. The motivation would have been to provide the coating with excellent adhesion and heat resistance (Chihara, column 2, line 40).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker in view of US Pre Grant Publication of Starodubov, number 2003/0202763 A1.

Walker teaches the limitations of Claim 1 but does not teach that the second polymer is a thermoplastic. Starodubov teaches optical fiber coatings made from materials such as thermoplastic and ultra-violet cured polymers (paragraph 11, pages 1 and 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the thermoplastic coating of Starodubov in the coating taught by Walker. The motivation would have been to seal the fiber and protect it from environmental contaminants (Starodubov, paragraph 11, page 2).

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

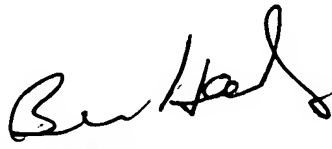
US Patent to Gantt et al, number 6,579,914.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerry Martin Blevins whose telephone number is 571-272-8581. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached at 571-272-2415. The fax number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JMB

  
Brian Healy  
Primary Examiner